

THE INVENTION CLAIMED IS:

1. A scanning electron microscope comprising:
an electron gun for producing an electron beam;
an objective lens for sharply focusing the beam onto a specimen;
a specimen holder for holding the specimen;
a power supply for applying a negative voltage to the specimen; and
a conductive plate having at least one hole permitting passage of the beam, the
conductive plate being disposed to provide a cover over the specimen, the conductive plate
being mounted on said specimen holder,
wherein a voltage substantially equal to the voltage applied to the specimen is
applied to said conductive plate.
2. The scanning electron microscope of claim 1, wherein said conductive
plate is held to said specimen holder such that the distance between the conductive plate and
a surface of said specimen can be adjusted.
3. The scanning electron microscope of claim 1, wherein plural holes for
permitting passage of the beam are formed in said conductive plate.
4. The scanning electron microscope of claim 1, wherein the voltage applied
to the specimen and the conductive plates is selected to reduce specimen charging and
damaging.
5. The scanning electron microscope of claim 1, wherein the electron gun
provides the electron beam with energy sufficient to minimize aberration in the objective
lens.